

REMARKS

This responds to the Office Action mailed on August 28, 2006.

Claims 17 and 26 are amended, no claims are canceled, and claims 29-32 are added; as a result, claims 1-32 are now pending in this application.

§103 Rejection of the Claims

Claims 1-5, 7-14, 17, 19-22, 24 and 27-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zdepski et al. (U.S. 6,006,256, hereinafter, "Zdepski") in view of Hite et al. (U.S. 6,002,393, hereinafter, "Hite").

The Office action correctly stated that Zdepski fails to disclose that the first video stream comprises interactive content that is replaced with the second interactive content based on the value of an option field included in the interactive content code. The Office action cites Hite to show these features.

Hite is directed at system and method for targeting TV advertisements to individual consumers. (Hite, Abstract.) Hite discloses transmitting to a recording device instructions that are used to "tell" the display which commercials should be played and which ones should be ignored. Such instructions are provided in advance of the commercial broadcast. (Hite, 4: 10-21.) Hite also discloses multiple commercials being simultaneously broadcasted in a television or radio commercial spot. One of the number of commercials in Hite may be designated or chosen as a default commercial. This default commercial is played unless replaced by a targeted commercial. (Hite, 4: 29-32.)

The Office action states that Hite discloses a video stream comprising first interactive content by disclosing "an enhanced commercial" at 3: 60-62. At column 3, Hite provides the following description.

... with the present invention, television (and radio) and advertising are enhanced by targeting, delivering and displaying electronic advertising messages (commercials) within specified programming in one or more pre-determined households (or on specific display

devices) while simultaneously preventing a commercial from being displayed in other households or on other displays for which it is not intended.

Hite, 3: 60-67.

As is evident from the passage above, in Hite, *television and advertising are enhanced* by delivering commercials to some households but not the others. Thus, the "enhancing" in Hite refers not to the content of the advertisements but rather to the selective delivery of the advertisements.

The Office action further makes a statement that a commercial in Hite supports interactivity and refers to the following description.

A viewer reaction feature can be included to cause additional relevant commercials to be presented in reaction to a viewer's response to questions or other viewer interaction transmitted using the up stream reporting capability described above. The relevant commercials could be for more detailed information about the same product or service. Alternatively, they could be for products or services which are likely to be of interest to the viewer based on the viewer's responses. For example, a viewer who requests more information about children's aspirin may also be offered a subsequent commercial on children's chewable vitamins.

Hite, 3: 17-29.

As can be seen from the passage above, it appears that the Office action presumes that commercials in Hite support interactivity because Hite mentions presenting additional commercials in reaction to *a viewer's response to questions or other viewer "interaction"* transmitted using the up stream reporting capability. It is submitted that a viewer's response to questions in particular and other viewer interaction in general is possible without the commercial including interactive content (e.g., a viewer may provide responses to questions by calling the telephone number or accessing the web site displayed in the commercial) . The reference to *viewer interaction* in the passage does not disclose interactive content included in a video stream,

which is evident from the description of the reporting capability utilized in Hite to transmit such "other user interaction." Hite discloses the reporting capability as follows.

In two way broadband systems, it is possible to implement and up stream reporting capability where signals are transmitted from the viewing location to a central database location for *reporting whether a specific viewing location had its receiving equipment powered and tuned to a specific channel*. This information can be used to further target the commercials. In situations where the broadband network is not capable of sending messages back to the central database, *other means* can be provided. *An example of such means is an auto dialer device* which accumulates the information and then at appropriate times dials a number and reports the accumulated data. The number dialed could be a local number or a "toll free 800" number. The reporting call can be made in a manner which first test to see if the phone line is in use and thereby ensures that calls in progress will not be interrupted. If someone in the home wishes to use the phone, this can be sensed and the report suspended and the phone line relinquished so that another call can be made. The interrupted data transmission would be completed later. In this manner, the use of *an auto dial reporting capability* can be accomplished without intrusion on the normal use of the telephone line.

Hite, 2: 44-65.

As can be seen from the passage above, while Hite discloses monitoring and reporting whether the receiving equipment powered and tuned to a specific channel, there is not hint of any of the commercials in Hite being in a form of a video stream that includes interactive content. It is submitted that information related to viewer interaction is obtained in Hite by monitoring whether the receiving equipment is powered and tuned to a specific channel. This technique does not suggest any interactive content being included in the video stream. The Office action further states that Hite discloses an interactive content code by referring to transmitting to a recording device instructions that are used to "tell" the display which commercials should be played and which ones should be ignored (Hite, 4: 10-21.) It is submitted that the instructions

mentioned above are not related to any interactive content, particularly in view of Hite lacking any description of a video stream that includes interactive content.

Thus, Hite, whether considered separately or in combination with Zdepski, fails to disclose or suggest "hardware adapted to receive one or more first video streams that include video data, first interactive content and an interactive content code, wherein the **interactive content code includes an option field** ...; an interactive content code detector adapted to detect the interactive content code and the option field therein, and **based on the value of the option field, to produce a control signal to indicate the first interactive content is to be replaced with second interactive content**; and a data insertion unit adapted to receive the control signal and to insert the second interactive content into the second video stream to produce a third video stream," and as recited in claim 1. Therefore, claim 1 and its dependent claims are patentable in view of the Zdepski and Hite combination and should be allowed.

Claim 8 recites "the encrypted interactive content code specifies second interactive content to replace the first interactive content." Thus, claim 8 and its dependent claims are patentable in view of the Zdepski and Hite combination for at least the reasons articulated with respect to claim 1.

Claim 14 recites "wherein the interactive content code specifies second interactive content to accompany a video broadcast based on the value of the option field." Thus, claim 14 and its dependent claims are patentable in view of the Zdepski and Hite combination for at least the reasons articulated with respect to claim 1.

Claim 17 recites "inserting the second interactive content based on the encrypted reference and the option field." Thus, claim 17 and its dependent claims are patentable in view of the Zdepski and Hite combination for at least the reasons articulated with respect to claim 1.

Claim 19 recites hardware "to produce a control signal responsive to detecting and processing an interactive content code and its associated option field" and "a data insertion unit ... to receive the control signal and to insert second interactive content into the second video stream responsive to information contained in the control signal." Thus, claim 19 is patentable in

view of the Zdepski and Hite combination for at least the reasons articulated with respect to claim 1.

Claim 20 recites "an interactive content detection unit adapted to detect an interactive content code identified within an encrypted interactive content code and to transmit a control signal responsive to detecting and processing the interactive content code and the option field" and "a data insertion unit ... to receive the control signal and to insert second interactive content into the first video stream responsive to information contained in the control signal." Thus, claim 20 and its dependent claims are patentable in view of the Zdepski and Hite combination for at least the reasons articulated with respect to claim 1.

Claims 6, 15, 18 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zdepski et al. in view of Hite et al. and further in view of Blackketter et al. (U.S. 6,415,438, hereinafter, "Blackketter"). Blackketter discloses a trigger that is broadcast along with a television video and that may include a Uniform Resource Identifier (Blackketter, 8: 5015; 1: 18-30).

Blackketter, whether considered separately or in combination with Zdepski and Hite, fails to disclose or suggest "based on the value of the option field, to produce a control signal to indicate the first interactive content is to be replaced with second interactive content." This feature is present in claim 6 by virtue of its being dependent on claim 1. Thus, claim 6 is patentable in view of the Zdepski, Blackketter, and Hite combination and should be allowed.

Blackketter, whether considered separately or in combination with Zdepski and Hite, fails to disclose or suggest "wherein the interactive content code specifies second interactive content to accompany a video broadcast based on the value of the option field." This feature is present in claim 15 by virtue of its being dependent on claim 14. Thus, claim 15 is patentable in view of the Zdepski, Blackketter, and Hite combination and should be allowed.

Blackketter, whether considered separately or in combination with Zdepski and Hite, fails to disclose or suggest "inserting the second interactive content based on the encrypted reference and the option field." This feature is present in claim 18 by virtue of its being dependent on claim

17. Thus, claim 18 is patentable in view of the Zdepski, Blackketter, and Hite combination and should be allowed.

Blackketter, whether considered separately or in combination with Zdepski and Hite, fails to disclose or suggest "an interactive content detection unit adapted to detect an interactive content code identified within an encrypted interactive content code and to transmit a control signal responsive to detecting and processing the interactive content code and the option field" and "a data insertion unit ... to receive the control signal and to insert second interactive content into the first video stream responsive to information contained in the control signal." This feature is present in claim 23 by virtue of its being dependent on claim 20. Thus, claim 23 is patentable in view of the Ciciora, Zdepski, Blackketter, and Hite combination and should be allowed.

Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zdepski et al. in view of Hite et al. and Blackketter et al. as applied to claim 15 above, and further in view of Ciciora ("Modern Cable Television Technology"). Ciciora discloses various information that may be carried in the vertical blanking interval (Ciciora, section 3.3.5). Ciciora, whether considered separately or in combination with Zdepski, Blackketter, and Hite, fails to disclose or suggest "wherein the interactive content code specifies second interactive content to accompany a video broadcast based on the value of the option field." This feature is present in claim 16 by virtue of its being dependent on claim 14. Thus, claim 16 is patentable in view of the Ciciora, Zdepski, Blackketter, and Hite combination and should be allowed.

Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zdepski et al. in view of Hite et al. and Blackketter et al. and further in view of Ciciora. Ciciora, whether considered separately or in combination with Zdepski, Blackketter, and Hite, fails to disclose or suggest "interactive content codes correspond to an interactive content to be inserted into the video stream based on values associated with respective option fields" recited in claim 25. Thus, claim 25 is patentable in view of the Ciciora, Zdepski, Blackketter, and Hite combination and should be allowed.

Claim 26 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zdepski et al. in view of Hite et al. and Kaiser et al. (U.S. 6,615,408, hereinafter, “Kaiser”) and further in view of Ciciora. Kaiser discloses embedding a trigger in the vertical blanking interval (Kaiser, 6: 65-67 and 7: 1-4). Kaiser, whether considered separately or in combination with Zdepski, Hite, and Ciciora, fails to disclose or suggest "an encrypted interactive content code into a closed caption region of a video stream, wherein a first portion of the interactive content code corresponds to second interactive content to be inserted into the video stream to replace first interactive content" recited in claim 26. Thus, claim 26 is patentable in view of the Zdepski, Hite, and Kaiser combination and should be allowed.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney at 408-278-4052 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR § 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: MS RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 27th day of September 2007.

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